A Work Project, presented as part of the requirements for the Award of a Master's degree in Finance from the Nova School of Business and Economics.

How can Fintech serve the unbanked in Sub-Saharan Africa?:

How is Fintech shaping the Financial Industry business models?

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How can fintech serve the unbanked in Sub-Saharan Africa?

How is the Fintech market developing and what do we expect for the future?

- The market gained traction *circa* 2005 and the United States of America (USA) are it's biggest geography
- It is expected to triple in size and we believe there will be a *survival of the fittest* phase, with players already financed and with positive cash-flows in the forefront

How is Fintech shaping the financial industry business models?

- Fintech complements banks' strengths by meeting new digital customer preferences
- Synergies between incumbents and new players can lower the cost to serve the unbanked

What are the opportunities for Fintech in Sub-Saharan Africa (SSA)?

- Sub-Saharan Africa is a land of opportunities for Fintech where it can have a positive impact in financial inclusion
- Only a restricted lot of countries in Sub-Saharan Africa have the required resources to make Fintechs thrive in the near future

How is Fintech creating value in SSA?

- Mobile network operators's (MNOs) large customer base allows them to lead the transition from informal finance to formal financial services
- Network effects accelerate financial inclusion: financial services finance technology and technology can deliver financial services faster

Challenges and Recommendations

- Countries would benefit if government focused on strengthening education, improving infrastructures, regulations and creating conditions for investment
- Fintechs would gain from focusing on customer-product fit and building partnerships, while improving country knowledge and decision making

Fintech can leverage the widespread smartphone adoption to offer financial services in Africa.
However, governments must reduce barriers to improve financial inclusion through economic digitalization.

Executive Summary

2.1 Fintech slice of banks

- Fintech has taken 16% of retail banking revenues
- Revenue share is sustained by 64% adoption rate, more predominant on younger ages

2.2 Main Areas Under Disruption

- Fintech model is more prone to meet customer’s increasingly digital preferences, especially on payments, lending and saving
- More agile IT systems allow fintechs to take advantage of liberalized data access

2.3 Fintegration

- Partnerships reduce costs for both fintechs and banks, allowing an easier data fetching and to meet customer preferences
- Product creation and implementation can improve if both companies cooperate closer

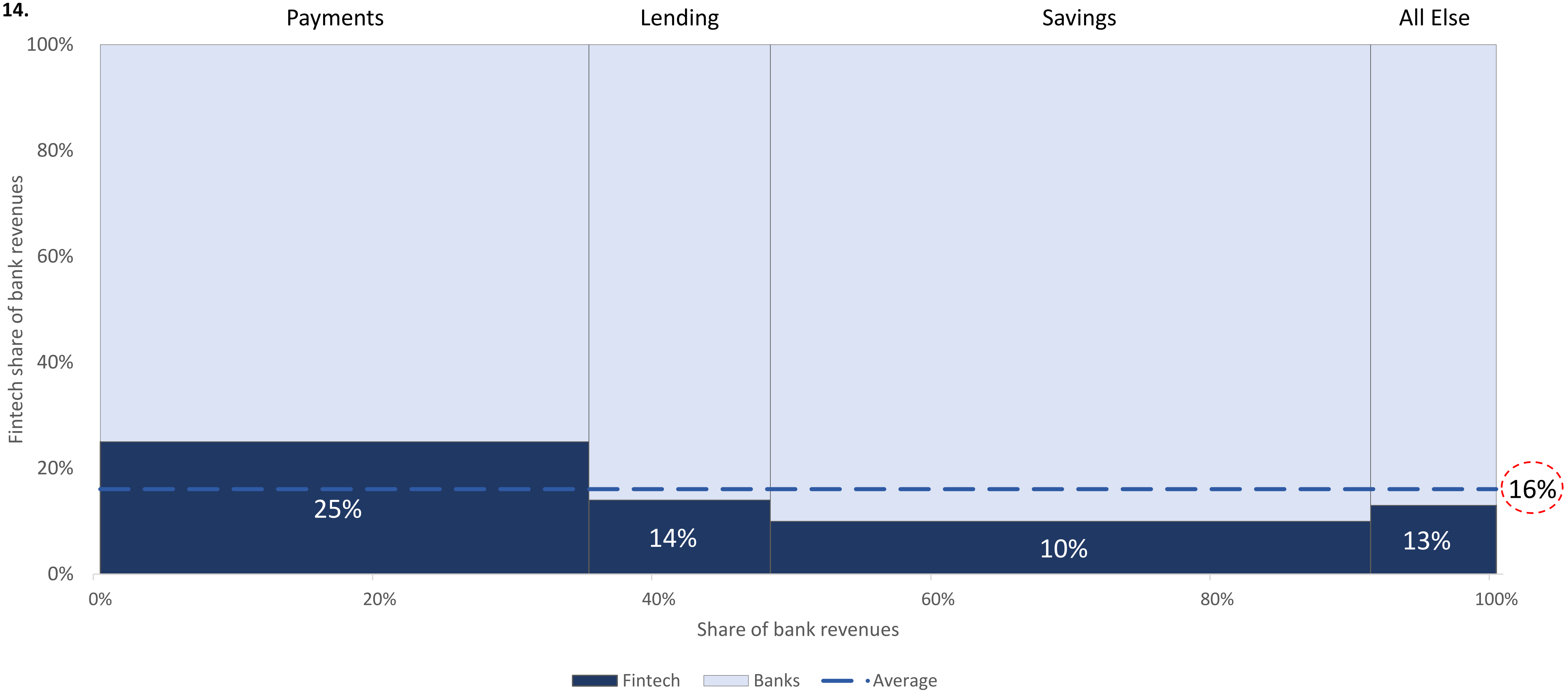
2.4 Serving the Unbanked

- Partnerships’ improvements can further lower the cost to serve clients
- Reaching scale is important from a sustainability perspective

Keywords of module 2: agile, disruption, partnerships, profitability

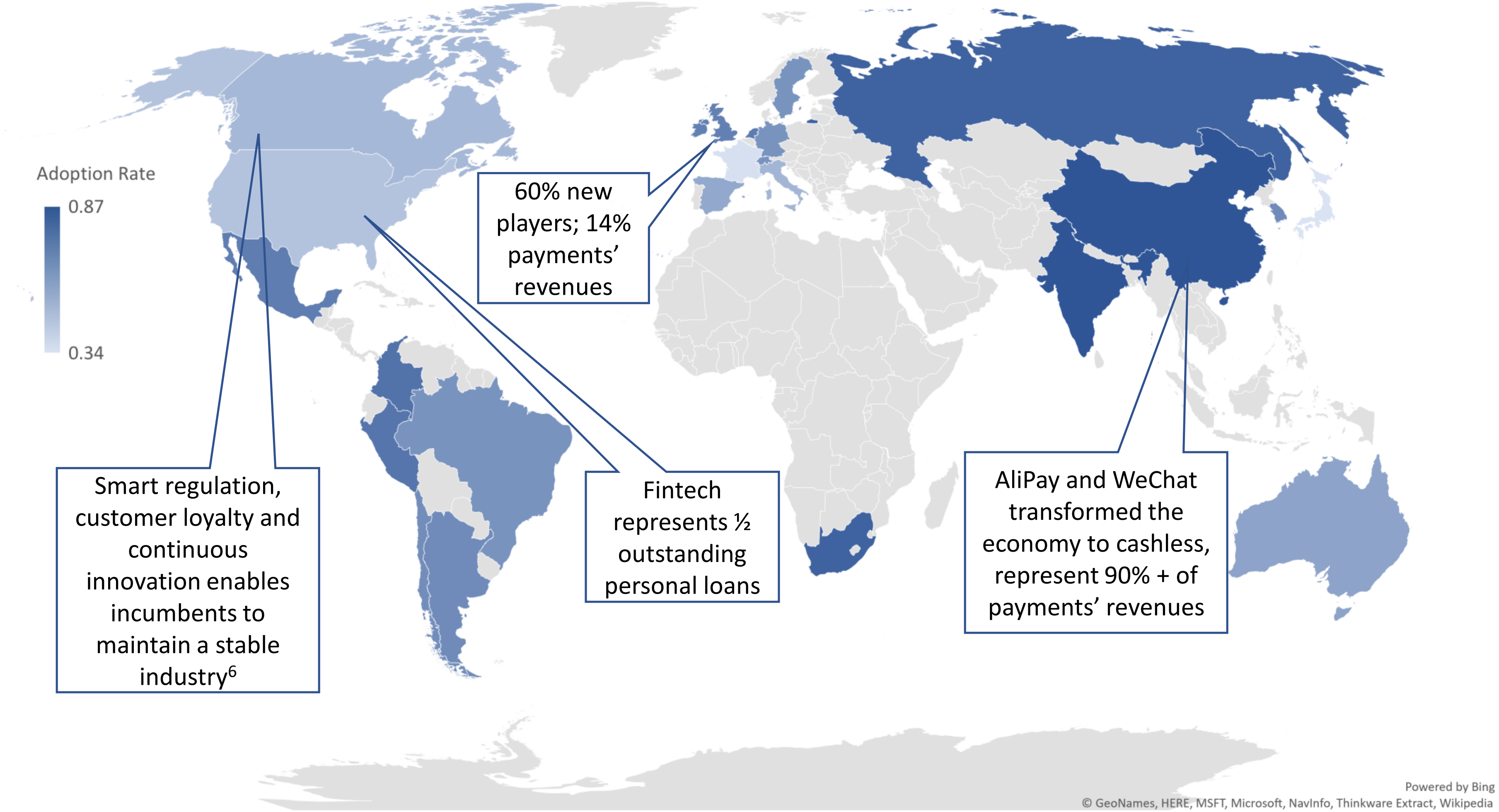
Fintech has already taken 16% of the $ 2 tn retail banking revenues Payments area leads it, followed by lending and savings/asset management

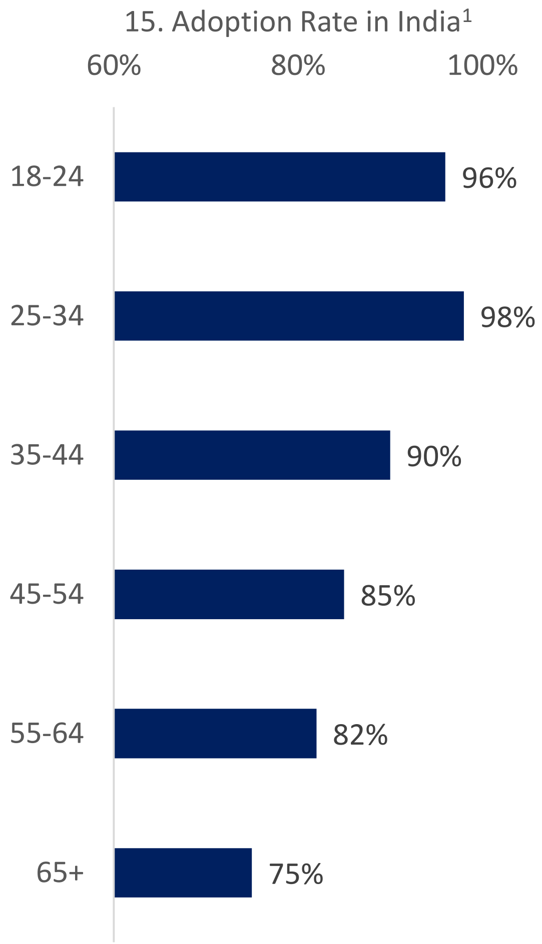
14.



Sources: 1. *Global Fintech Adoption Index*. EY, 2019.; group analysis | 2. "Alternative Financing Landscape." The Kaplen Group, 2015. | 3. *The Fight for the Customer: 2015 Global Banking Review*. McKinsey, 2015.
4. *Global Banking Report 2016* . McKinsey, 2015. 5. *Global Retail Banking 2019: The Race for Relevance and Scale* . BCG, 2019.

Emerging markets (EMs) lead fintech adoption, reaching 64% worldwide[1]. Younger generations explain the sustained revenue change to digital



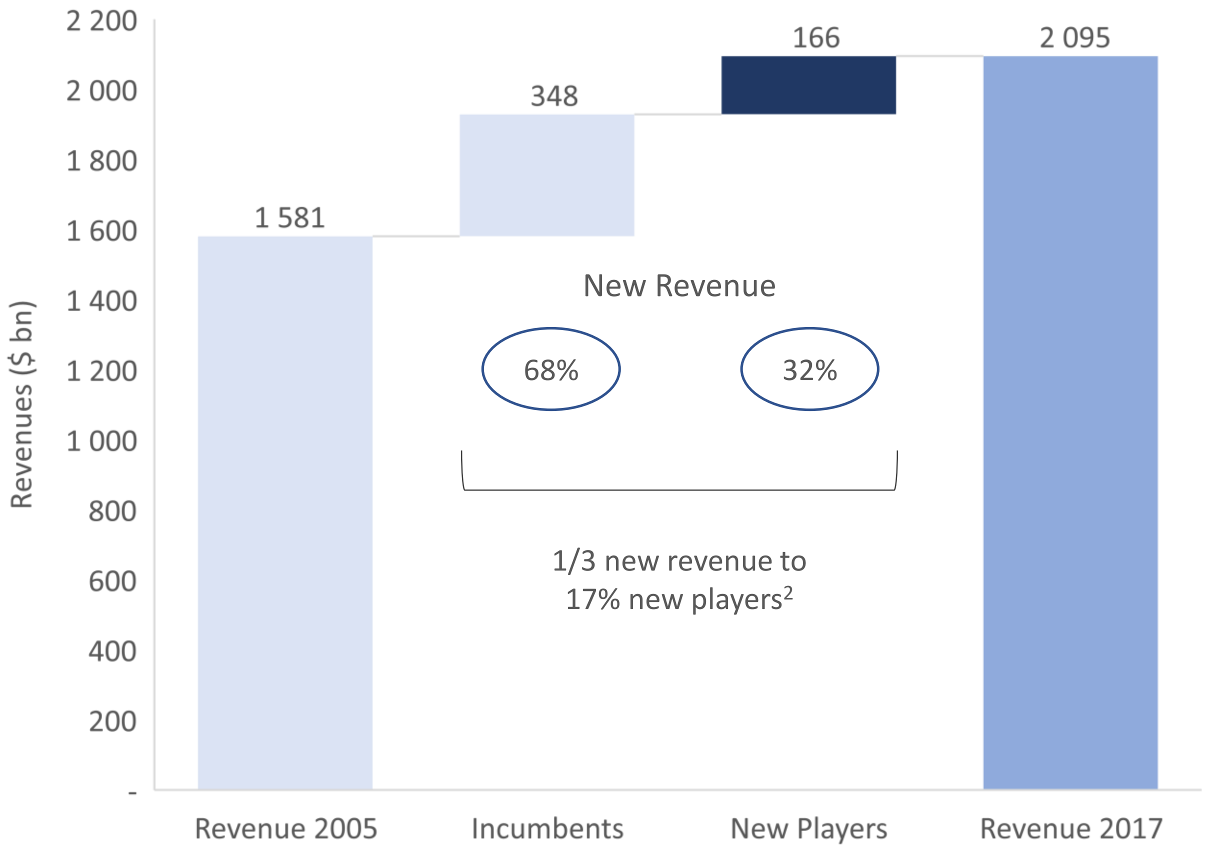


A 64% adoption rate could potentially inch higher the 16% market share already taken from banks

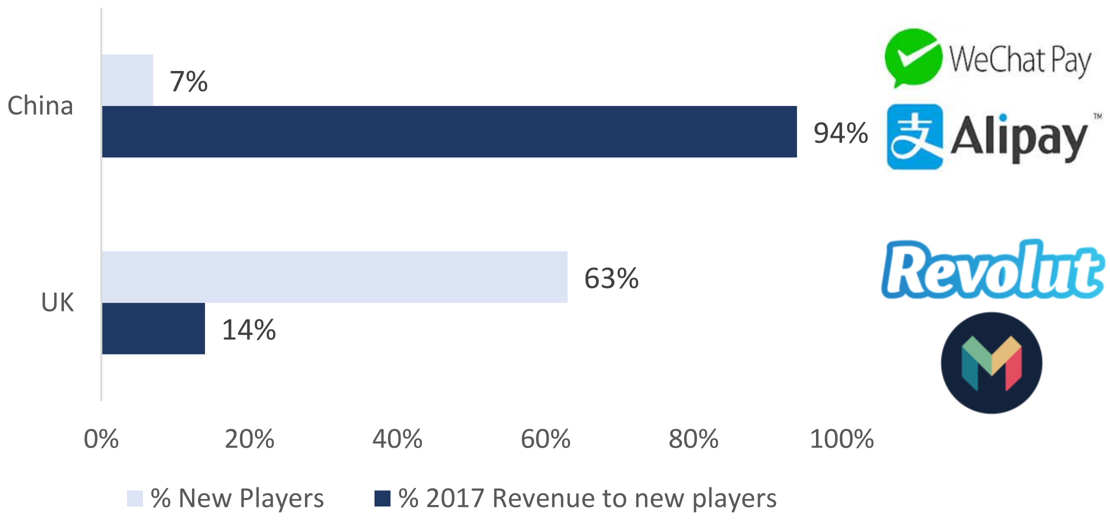
Sources: 1. *Global Fintech Adoption Index*. EY, 2019. | 6. *Caterpillar, Butterflies and Unicorns: Does Digital Leadership in Banking Really Matter?* Winning in the Digital Economy. Accenture, 2019.

New players on EMs lead the disruption of the ever-growing payments sector

16. New players represent 8% revenues[7] of a market expected to reach 2.1tn globally by 2022[9]



17. Grabbing market share on EMs is easier due to regulation push and no infrastructure



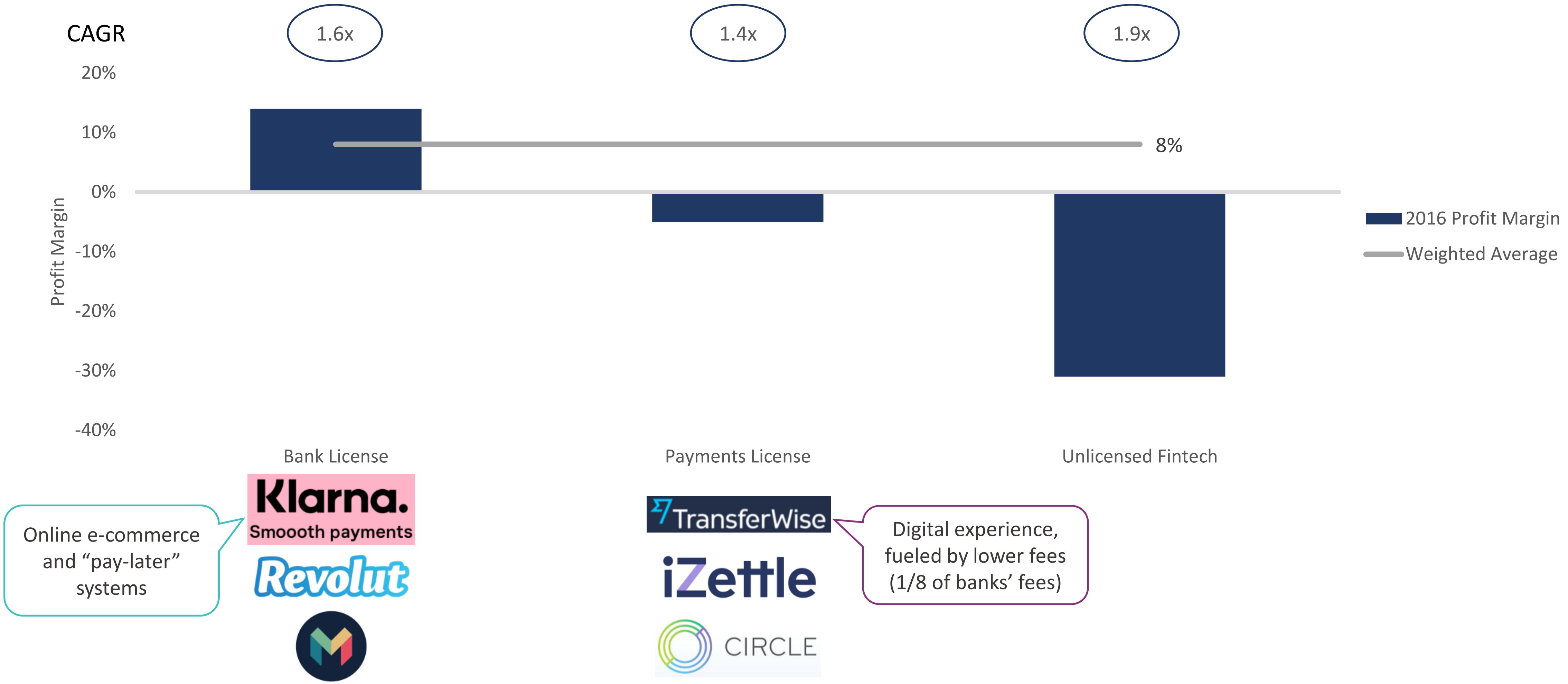
- China's government push for digital has enabled the shift to a **cashless economy** on a single generation
- UK's **new regulation**, FCA and CCA support enabled the rise of 63% new players, where 15+ fintech have already acquired a banking license[8]

Fintech is positioned to seize the expected market growth on EMs, provided the right regulation is in place

Sources: 7. *Star Shifting: Rapid Evolution Required*. Winning in the Digital Economy. Accenture, 2018. | 8. *Beyond North Star Gazing: How Our Four Winning Bank Models Map to Actual Market Evolution*. Winning in the Digital Economy. Accenture, 2018. | 9. *Payments Disrupted: The Emerging Challenges for European Retail Banks*. Deloitte, 2015.

However, becoming profitable is a challenge that only fintechs with a banking license seem to overcome

18. Only properly licensed fintechs become profitable[7], since it allows easier funding through deposits

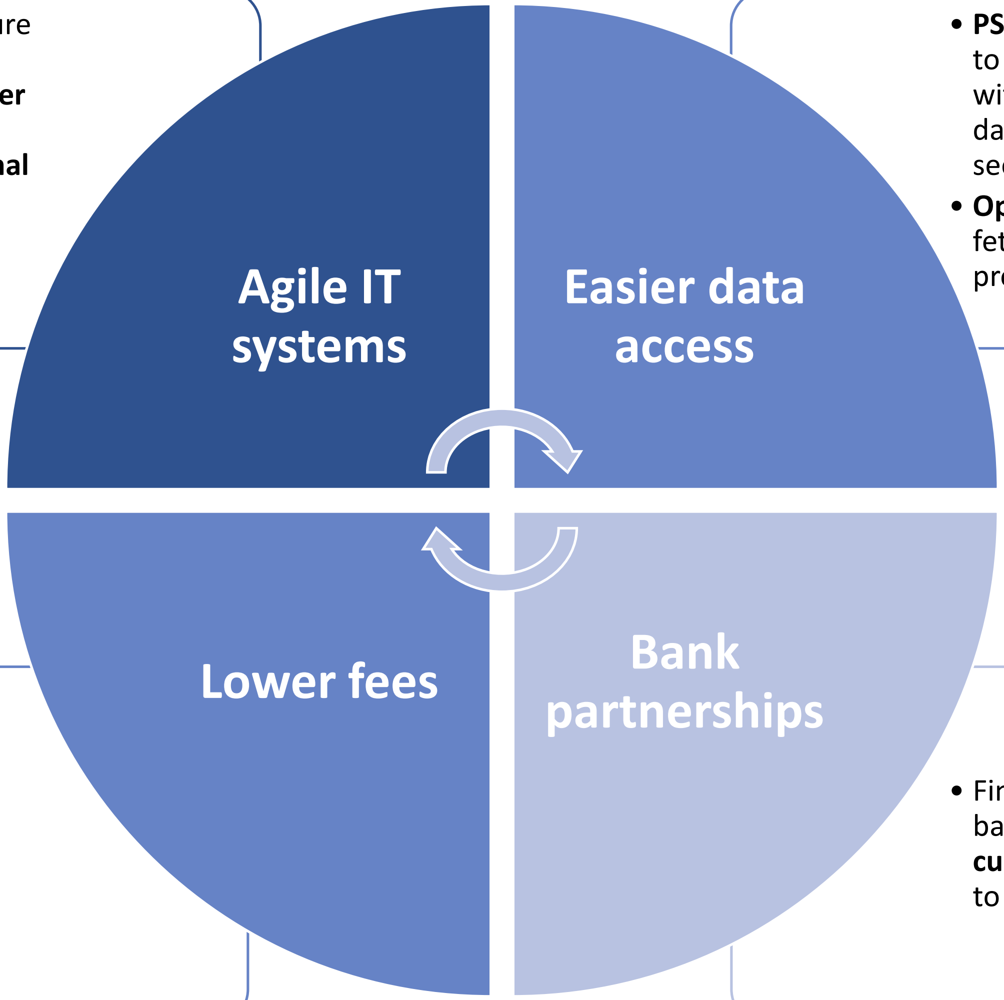


Sources: 7. *Star Shifting: Rapid Evolution Required*. Winning in the Digital Economy. Accenture, 2018. | 10. Tinnila, Markku. "Impact of Future Trends on Banking Services." *Journal of Internet Banking and Commerce* 17 (2012).

Great tech platforms and a disruptor-friendly framework are key for fintech success, which could be undermined by costly customer acquisition strategies

- Newly created infrastructure allows Fintechs to quickly adapt to **changing customer preferences**, while maintaining **low operational cost**
- No costs on branches

- **PSD2** allowed more companies to access raw financial data, with incumbents losing their data monopoly. 65% players see this as an opportunity[11]
- **Open APIs** allow easy data fetching from one service provider to the other



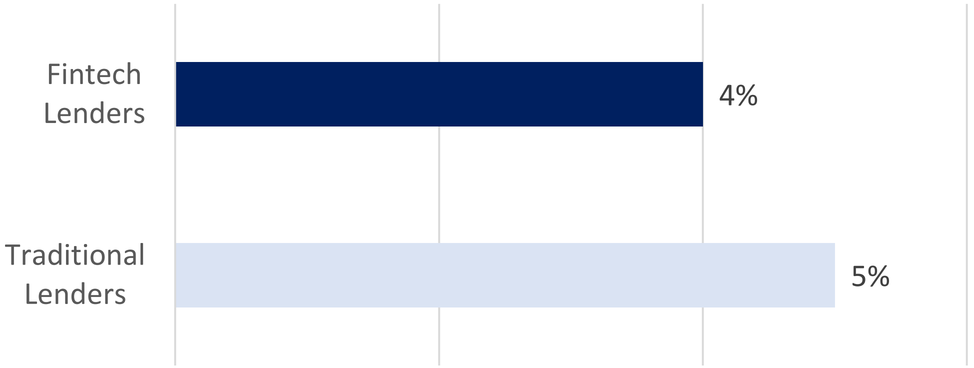
- TransferWise, a company focused on international transfers, charges **1/8 the fees of regular banks**.

- Fintechs that partner with banks lever an **existing customer pool**, allowing them to focus on tech

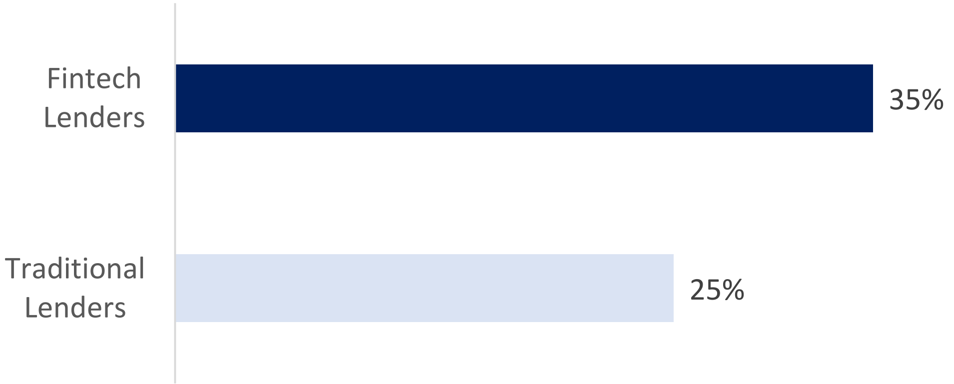
Sources: 11. *EBA Report on the Impact of Fintech on Payment Institutions' and e-Money Institutions' Business Models*. European Banking Authority, 2019.

Fintech is disrupting lending through inclusiveness However, there is untapped market potential

Fintech helps reducing financial discrimination

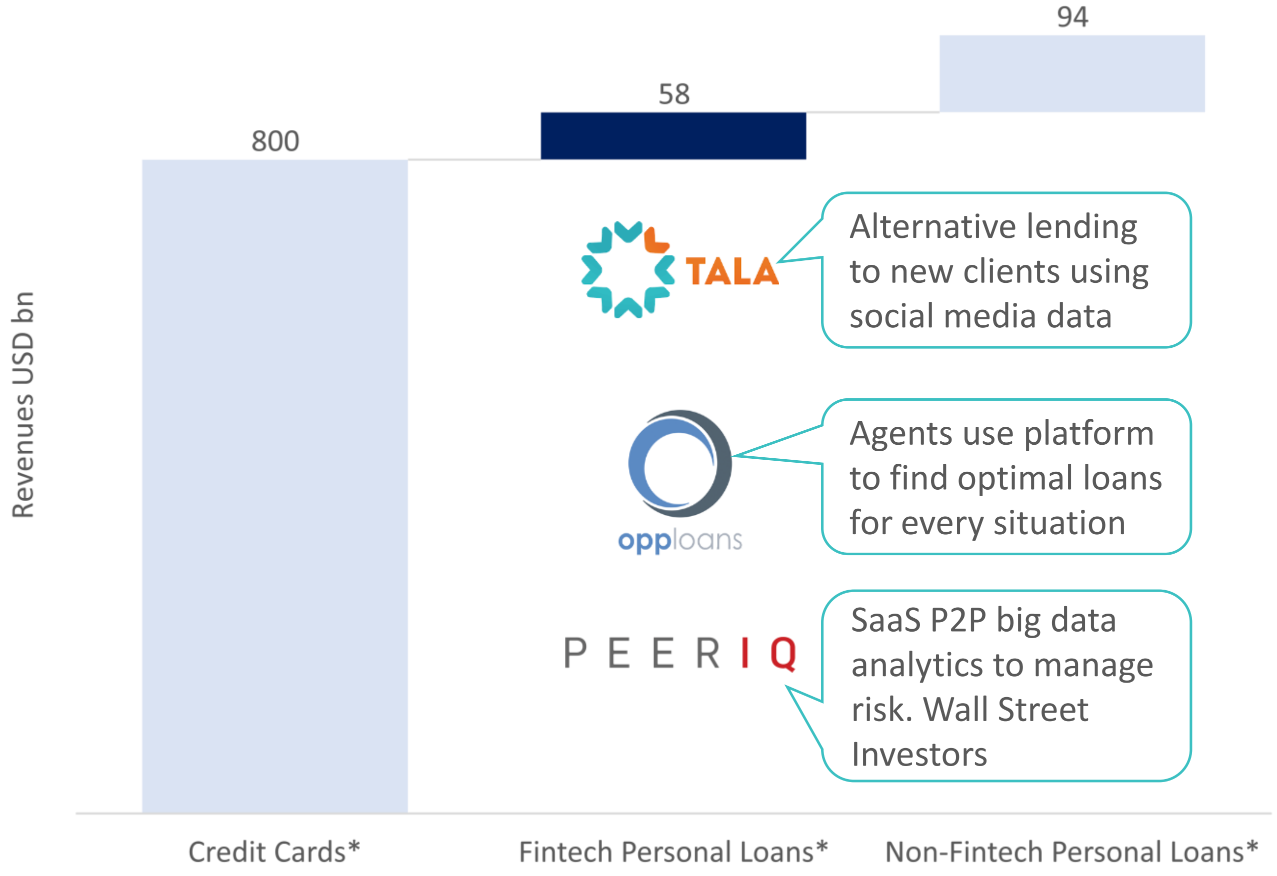


19. Likelihood excess that Afro-americans and Hispanics will be rejected a mortgage[12]



20. % of USA customers under 30[13]

21. Despite representing >1/3 of outstanding personal loans[14] in USA, Fintech has not yet covered the market on the credit cards arena

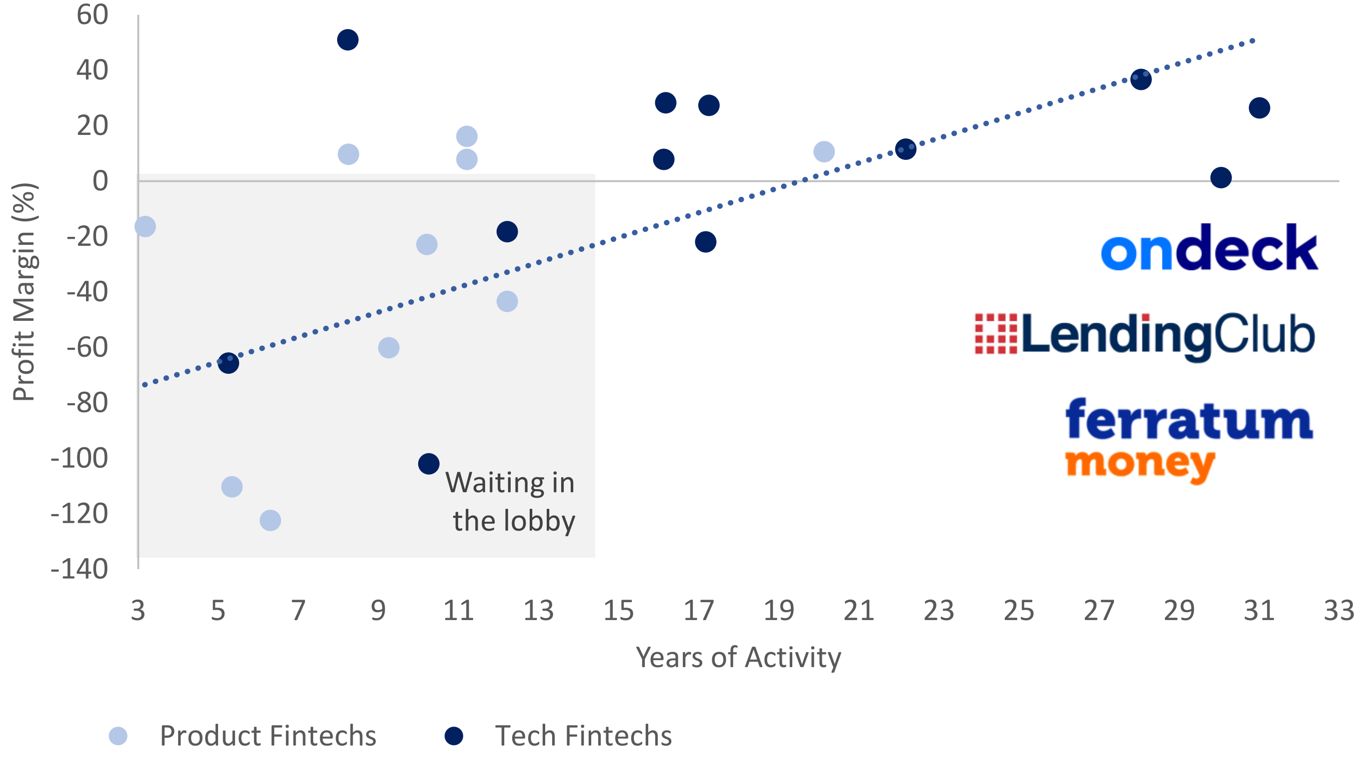


*2017 USA Revenue

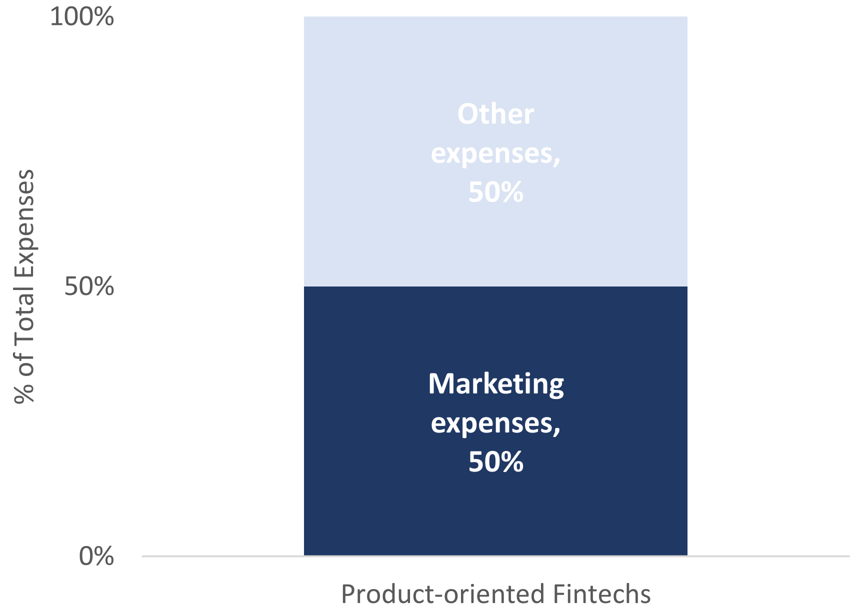
Sources: 12. DiLorenzo, Vincent. “Fintech Lending: A Study of Expectations Versus Market Outcomes.” *SSRN Electronic Journal*(2018). Accessed January 2, 2020. https://www.ssrn.com/abstract=3247112. | 13. *Fintech Marketplace Trends Report*. Experian, 2019. | 14. “Fintech Continues to Disrupt Consumer Lending.” *Investment Insight*. Morgan Stanley Investment Management, 2019.

Tech-oriented fintechs are more profitable than product-oriented ones However, companies take 8-14 years to become profitable

22. Tech providers are more profitable than product providers, taking 8-14 years to become profitable[15]



23. Marketing expenses on aggressive customer acquisition strategies slash product-oriented fintechs' profits[15]



However, growing globally is difficult due to **unharmonized legislation** through several countries[2]

Providing services for incumbents allows fintechs to be more profitable, while also doing so earlier

Sources: 15. *Where Will Fintech Lending Land and What It Means for Banks: The Time Is Right for Strategic Collaboaration*. Accenture, 2017. | 16. *Non-Bank Lending in the European Union*. Alternative Credit Council; Allen & Overy, 2019.

Great tech platforms partnering with banks reduce costly customer acquisition strategies and provide alternative credit scoring models

Agile IT systems

- Fintech companies are better prepared to adapt to fast-changing customer preferences
- Having **no IT legacy** means they can provide services at a lower cost

Fully digital customer journey

- From leads to origination and payment, fintechs can provide a fully **digital end-to-end experience** to their customers
- New data can be gathered from fully digital companies

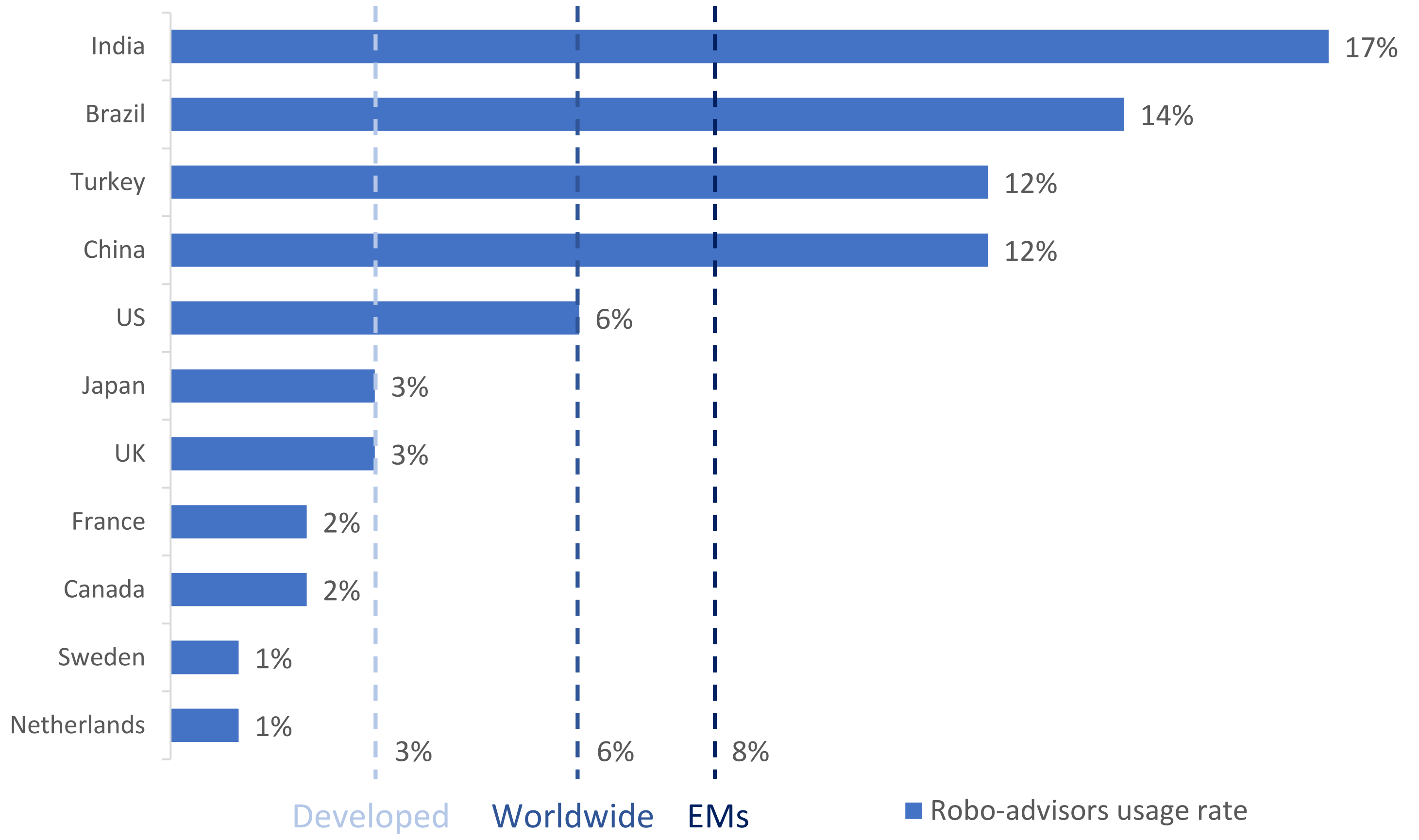
Comprehensive alternative credit scoring

- Data acquired can be used to analyse customers **not served by banks**
- Lending as a Service (**Laas**) partnerships with banks are the most profitable activity, making use of banks’ existing clients pool

Savings

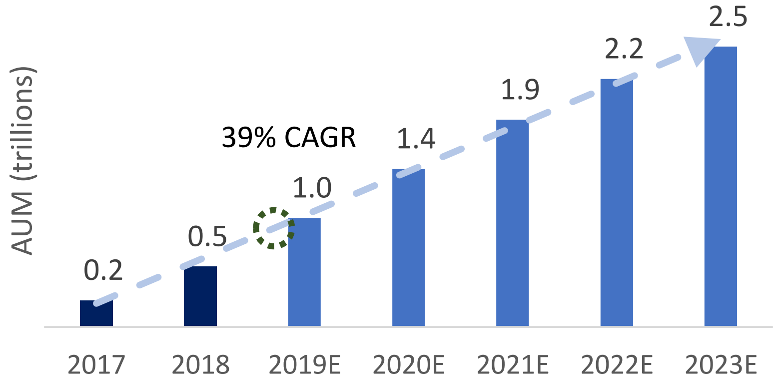
Robo-advisors play a significant role on the savings landscape disruption More than USD 900bn AUM globally, primarily adopted on EMs

24. EMs lead robot-advisor usage rate, which reaches 6% worldwide[17]



4/10 affluent customers (Net Worth $100 k - $1 mn) that change primary wealth management firm move to a digitally led one[18]

25. Robo-advisors set to reach $ 2.5 tn AUM in 2023[19]

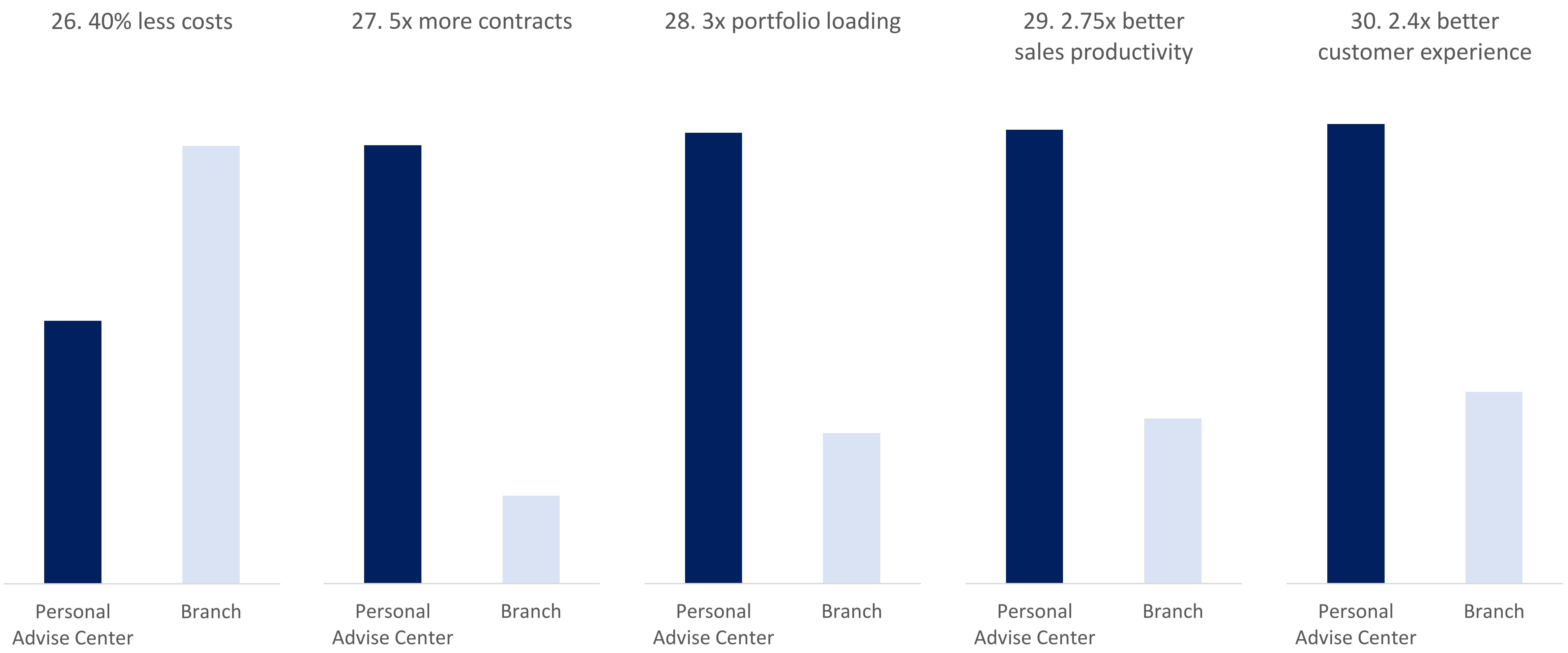


Digital platforms enable financial institutions to reach the **previously underserved affluent customers**

Sources: 17. *Global Banks: Is FinTech a Threat or an Opportunity?* Q-Series Report. UBS Limited, 2016.| 18. *The Virtual Financial Advisor: Delivering Personalized Advice in the Digital Age*. McKinsey, 2015. 19. *Personal Finance Report 2019*. Statista, 2019.

Savings

Virtual financial advisors improve firms' economics and customer experience



Source: 18. *The Virtual Financial Advisor: Delivering Personalized Advice in the Digital Age*. McKinsey, 2015.

Savings

Centralization and scale drastically improve firms' efficiency

Higher efficiency

- Advisors do **not "lose time"** on trips, allowing for a larger portfolio loading
- **Centralized knowledge** makes training easier
- Poach client-advisor risk mitigated

Full availability

- Clients can easily get **advice anywhere**, anytime
- Access to a larger pool of knowledge through centralized knowledge hubs
- Standardization of the advisory process

Clients' needs met

- Improved **use of digital**, more available channels
- **Reduction in fees** due to better cost-efficiency
- Larger expertise access

Robo-advisors are one of the most prominent technologies, designed to provide more personalized 24/7 service to a greater number of people with low fees. However, the **human element** is still important in investment services[20]

Capitalizing digital opportunities is "easy" and profitable, but the human element seen on banks is still important

Sources: 20. Lee, In, and Yong Jae Shin. "Fintech: Ecosystem, Business Models, Investment Decisions, and Challenges." *Business Horizons* 61, no. 1 (January 2018): 35–46.

Fintech strengths allowed its current disruption pace
However, banks have relevant expertise that help it become profitable sooner

Fintechs have more agile IT systems to meet customer demands, providing them with a **better user experience** and **eliminating costs** of branch operations

Payments

Much success owned to **lower fees** that slash profit margins

Non-licensed fintechs find it hard to be profitable (only the ones with a bank-license are so)

Lending

Costly customer acquisition strategies slash fintechs' profitability

Producing platforms for incumbents yields better results

Savings

Virtual advisors improve both the **cost efficiency** and **access to expertise**

Human input is still highly-valued, demanding the **need for human experience** seen on banks

Fintech disruptors have started providing services for incumbents

Competition

- Fintechs started by disrupting important areas of banks' revenues
- Drastic evolution in the Business Model of Banking, from one bank providing all services to a **group of players providing a variety of services**[21]

Profitability challenge

- Aggressive customer acquisition strategies and lower fees allowed fintechs to thrive, but **lowered their profitability**
- Banks' loss of scale and macroeconomic conjecture also affected their profitability

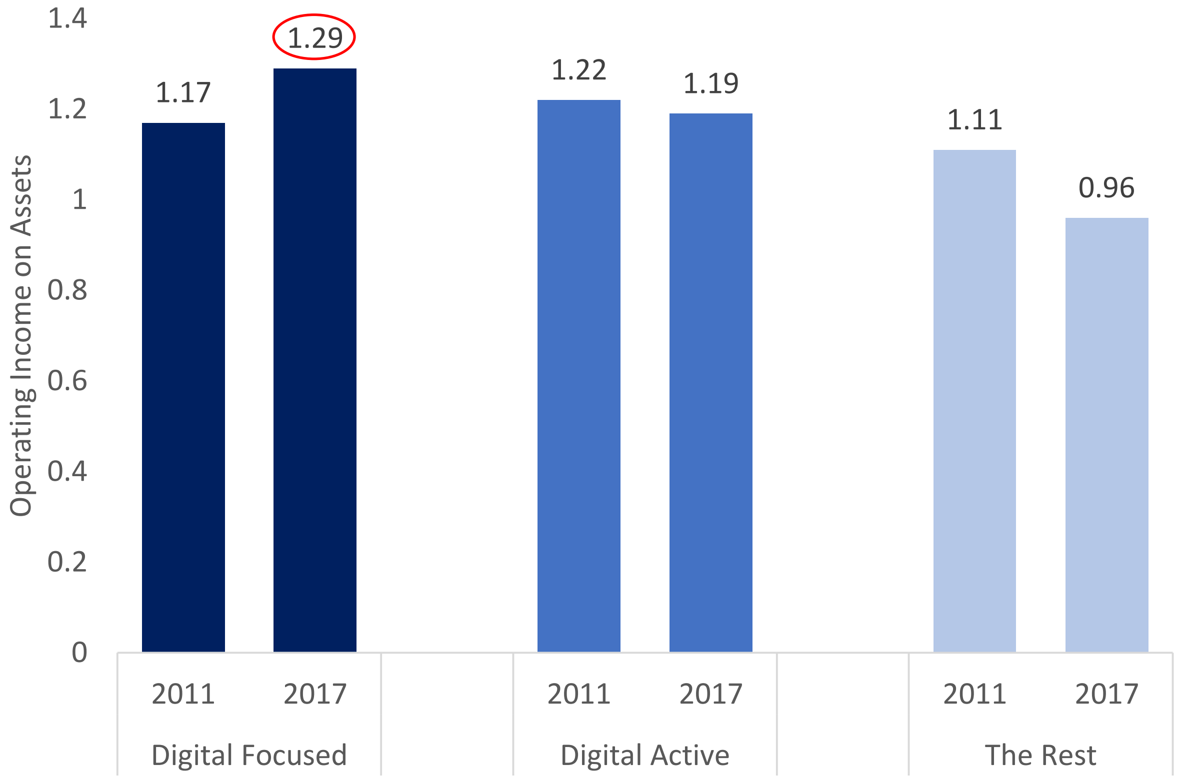
Cooperation

- Fintech operated banks are comparatively better at **managing raw information that can be digitalized**[22]
- Only 42% of payment providers on Europe report product development without involvement of external providers[11]
- Banks that moved to digital since 2011 have gained an edge when comparing income on assets

Sources: 11. *EBA Report on the Impact of Fintech on Payment Institutions' and e-Money Institutions' Business Models*. European Banking Authority, 2019. | 21. Lohia, Rohit. "How Are Banks Getting The Support from Fintechs." *Entrepreneur India*. | 22. Navaretti, Giorgio Barba, Giacomo Calzolari, Joss Manuel Mansilla-Fernandez, and Alberto F. Pozzolo. "Fintech and Banking. Friends or Foes?" *SSRN Electronic Journal* (2018). Accessed January 2, 2020. https://www.ssrn.com/abstract=3099337.

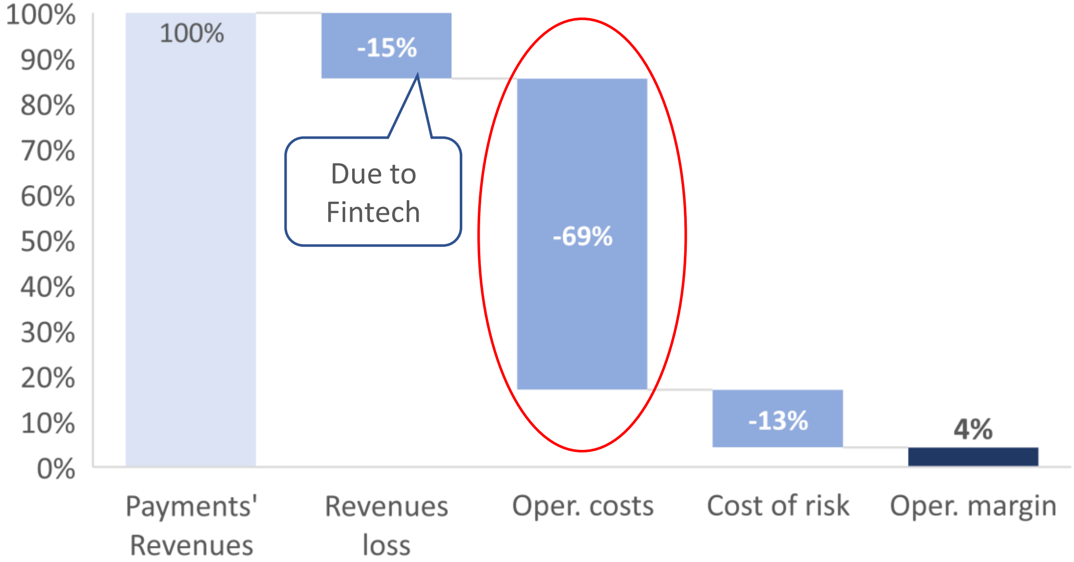
Banks moving to digital have seen profit margin efficiency improvements Overcoming hardware expenses represents the biggest challenge

31. Digital focused banks are the most profitable



6.5/10 banks report already being close to or **below the cost level** of payments' revenues[23]

32. On 2025, banks' operating expenses and high competition is expected to still slash payments' profitability[24]

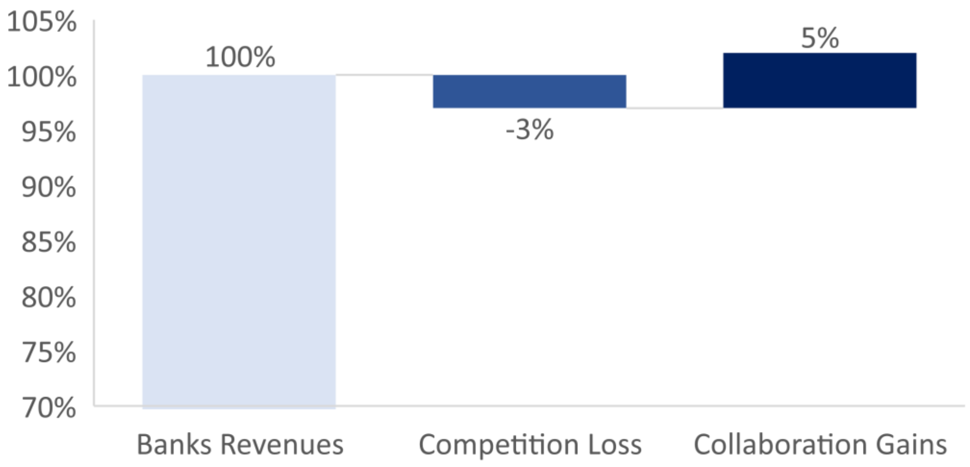


Using fintech platforms can lower banks' costs while protecting revenues, powering their move to digital

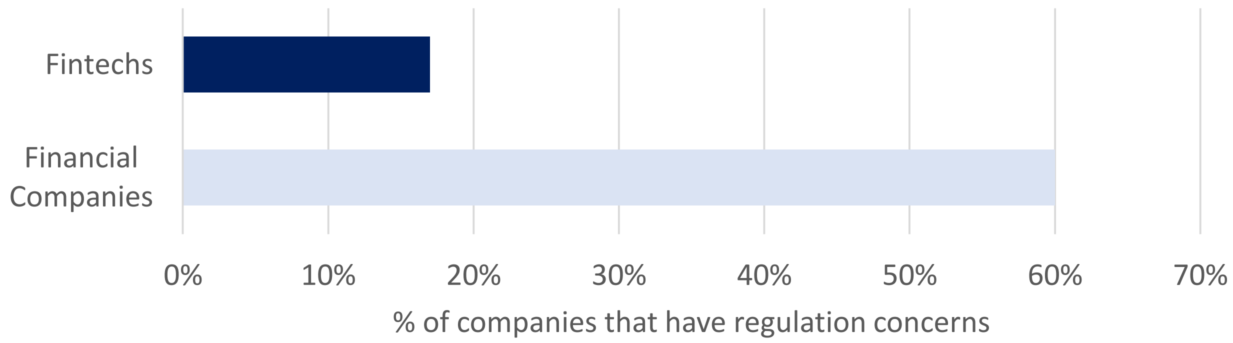
Sources: 23. *The Payments Transformation Race: Criteria for Success* . Aite, 2019. | 24. *Global Payments Pulse Survey 2019* . Accenture, 2019. | Graph Source: Caterpillars, Butterflies and Unicorns: Does Digital Leadership in Banking Really Matter?, Accenture

Better partnerships expected to bring revenue increase to banks
Banks find clients effortlessly, fintechs are better at product development

33. Fintechs can take 2-3% of banks' revenues, but banks can gain up to 5% from cooperating with them[17]



34. Regulation Concerns[25]



PSD2 and several regulatory sandboxes favor Fintech's agile data handling, since they do not need to comply with traditional institutions tighter regulation

🟢 Positive
🟡 Neutral
🔴 Negative

Phases of onboarding process	Banks	Fintech
Prospecting	🟢	🔴
Proof of Concept	🔴	🟢
Procurement	🟡	🟡
Implementation	🔴	🟡

Integrating product creation between banks and fintech may reduce time-to-market, with regulation helping fintech

Sources: 17. *Global Banks: Is FinTech a Threat or an Opportunity?* Q-Series Report. UBS Limited, 2016. | 25. *Mind the Gap: Addressing Challenges to Fintech Adoption*. Accenture, 2018.

Fintechs and banks are joining forces to embrace customers’ shift to digital

Data Sharing

Third parties such as tech or telecom companies **fetch banks’ data** and use it to co-create solutions better fitted to customers[26]

8/10 leading banks have partnered with a fintech[27]

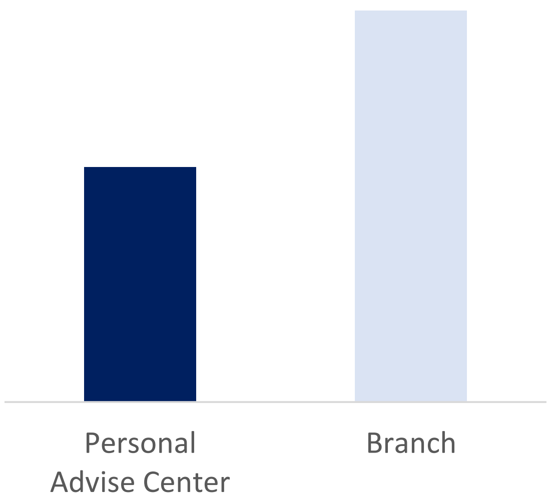
Product Creation

Access to payments’ financial data allows companies to create **alternative credit scoring**. New products allow companies to gather more insightful data from clients. Companies like Revolut and Monzo looking to provide credit any time soon.

Sources: 26. “How Can the Dutch Golden Age Inspire Open Banking?” *Accenture Insights - Innovation*. Accenture, 2018. | 27. *The Last Pit-Stop? Time for Bold Late-Cycle Moves*. McKinsey, 2019.

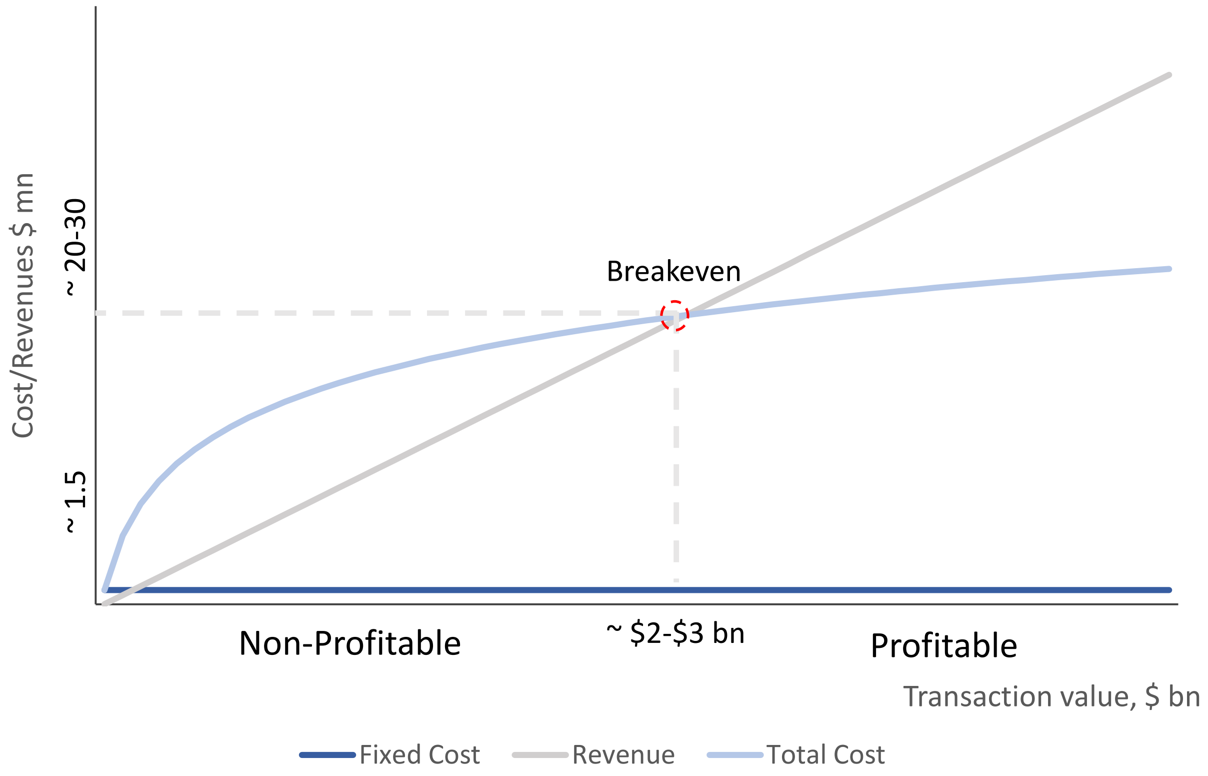
Fintechs' inherent low-cost structure together with banks' scale can serve the unbanked

35. 40% less costs on both savings and payments[18,29]



Mobile banking does not require the same investment in branch infrastructure as traditional banks and agent banking serves low-population density areas at a significantly lower cost than traditional banks.[28]

36. However, fintechs lower cost to serve is only profitable when scalable[3]



Sources: 18. *The Virtual Financial Advisor: Delivering Personalized Advice in the Digital Age*. McKinsey, 2015. | 28. *Banking in Sub-Saharan Africa, EIB Interim Report on Digital Financial Inclusion* . European Investment Bank, 2017. | *29. Mobile Money in Emerging Markets: The Business Case for Financial Inclusion*. McKinsey, 2018.